ARGONAUTS

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The Registry $500 Challenge ScriptX

THE MAKING OF SHERLOCK

by *Elliot Luber VP Technology Solutions*
for ICOM SIMULATIONS, INC.

ICOM Simulations breaks new ground by porting unique interactive mystery series onto CD-ROM

Sir. Arthur Conan Doyle would be more than a little surprised to see what his famous creation, Sherlock Holmes, is up to today. Ninety years after his appearance in "Hound of the Baskervilles," the great detective has discovered himself far from the printed page—in a breakthrough interactive movie on CD-ROM, which is played on computers and video game systems. And making that transition required more than a little detective work; the game's creators were developing an entirely new video medium.

"Sherlock Holmes, Consulting Detective™," from Wheeling, IL-based ICOM Simulations, is the first computer game that makes extensive use of motion video to create a true interactive movie. More than 90 minutes of video transport players into the game and allow them to interact with Holmes, Watson and more than 50 other characters. To solve each of three murder mysteries, players must match wits with Holmes himself and use a combination of logical thinking and deductive reasoning to create an ironclad case against the suspected murderer. The product was first released in Japan where it was a top seller. It was released here in January, and was already the number-one selling CD-ROM in America that month, according to January listings published in *New Media* magazine (April issue).

For ICOM, putting this project together was a multistep process. Aside from the traditional demands involved in making a 90-minute movie, the company had to work out a way of getting that movie onto CD-ROM and onto the different platforms the game is played on. These now include the IBM PC and compatibles, Apple Macintosh, the NEC TurboGrafx-16 game system, the Fujitsu FM Towns and Commodore CDTV system. And, on top of that, ICOM had to develop a game that people would enjoy playing.

It all began in the fall of 1989, according to ICOM creative director Ken Tarolla. "First we had to define what we wanted to do," he said. "We had to envision what this game would be, what vehicle people would use to move around in it, what type of user interface it would have, etc. We were breaking new ground and had to literally define what an interactive movie would be like as we went along."

The next step, Tarolla said, was coming up with the stories, which are

originals, not based on actual Doyle writings (the game has been authorized by Doyle's estate). "We had to flowchart it out and outline it," he said. "We had to define all the characters, and then write the scripts. Each of the scripts ran about 50 to 55 pages."

Because the interactive nature of the game allows players to choose what trail to follow and what vignettes they want to see, each of these vignettes is relatively self-contained. "We didn't have to worry about transitions," said Tarolla. "It was more like making a number of self-contained little movies." The scripting process, Tarolla said, took about three-and-a-half months, and production began in March 1990.

Production

"Here we came to the classic style of going out, producing and shooting," Tarolla said. "We had to get a good costumer, for example, because we had 30 actors and about 100 costumes. We needed a set designer, a stylist and prop master to capture the time period."

The project was shot in Minneapolis, entirely in the studio, primarily because of the availability of non-union actors. "Because we're working in an entirely new medium, the Screen Actors Guild has not really ironed out the specifics of this situation," Tarolla explained. "So rather than deal with that, we went non-union. Minneapolis also has a vital theater community, so the talent is used to doing dramatic work, as opposed to just commercials."

The shoot itself was a three-camera affair, actually much of it was shot and cut soap opera style and recorded on Sony 1-inch videotape recorders. Sixty percent was done on sets, 40 percent on Ultimate. "It was shot just like you'd normally shoot a soap opera, with each scene being a self-contained vignette " Tarolla said, "although we did have to make some adjustments to suit the target technology."

For one thing, because of ICOM's software-based video compression, which gives them 15 frame-per-second video filling about one quarter of the screen (160 by 100 pixels), certain precautions had to be taken in acting and shooting styles. Movement of the actors was cut down to a minimum, so as not to seem jerky or blurred, and camera movement was eliminated altogether. Also, the crew shot more close-ups than usual to compensate for the limited size of the screen. Finally, because the PC screen will only allow only 256 colors in the final output, the cinematographer kept the lighting flatter than usual for a dramatic program.

Production took four weeks, followed by two weeks of post production and a week and a half of audio sweetening. "From the production side, it was pretty straightforward," commented Tarolla. "The hard part came later."

Technical Barriers

"This is where the real challenge came," Tarolla said. Getting 90 minutes of video from a one-inch analog master to the digital system (with pixels instead of lines) required special algorithms and tools that ICOM spent two years developing. "We basically had to invent the system as we went, but realized that once we crossed these hurdles we

Editorial

Just under 5,000 copies of the last issue were distributed, including the registered developer base in UK, France, Germany, Australia and N.A. It will be interesting to see the results which will be published in the Fall issue along with the talent registry.

With all the doom and gloom it is worth stepping back for a moment and looking for the opportunities.

Where are they? In products that have people along the food chain acting in their own self interest that is mutually beneficial instead of harmful. Think about MPEG.

The encoding platforms will be expensive but the playback devices will be cheap. What's a viable economic model that has something in it for everyone? Company X builds and markets the least expensive encoder board it can build. The board is bundled with a bare bones piece of software just good enough to record movies and break them into clips and rearrange them.

The software is designed with a completely open architecture that is freely published with no restrictions on use. The intent is for other people to develop plug and play modules to do more sophisticated work and make the hardware more attractive. Company X makes its money from selling the hardware and of course without their basic software core, the plug and play modules are useless.

Dealers marry this gadget to a CD-ROM cutter and go into the service bureau business. They are then in a position to supply consumer level tape to MPEG CD-ROM services. A business or consumer drops off a video tape and gets back a CD-ROM. They then use their software to play it back in any preferred order and record the result on video tape complete with any special effects they may have added or deliver their presentation using the CD for raw data.

The dealer also gets into the CD check disk business. The Phillips CD-ROM cutter can handle MAC,PC,AMIGA,CD-I etc. with the appropriate software. This ensures the dealer has plenty of potential clients.

Given access to cheap and local CD cutters, you'll develop a cottage industry in those geographical areas that have one. This also opens the possibility of government grants to finance the cutters since it has a potential employment impact. Contact your local government small business people.

would have significant new proprietary technologies for our publishing division to offer content providers."

First, the master was transferred to laserdisc, "because laserdisc is frame-accurate and easy to access," Tarolla explained. A scripting language had to be developed to access the laserdisc, marking start and end points, and to interweave stills with the video. ICOM developed its own scripting language to allow the computer to assemble the material automatically.

From there, the vignettes had to be converted into huge data files, each one essentially a database of frame information. Each of the project's 90,000 frames had to be dealt with individually, converted to 256 colors and acceptable resolution, and stored in the computer. The process of going from analog master to digital form took eight weeks of 24-hour computer activity for each platform—PC, Mac, etc.

Eventually, the video in data form had to be compressed, using ICOM's proprietary software-only compression algorithms, in order to be read at 150 kilobits per second from a CD-ROM. Because each of the computer systems reads CDs differently, scene players had to be written for each platform. "Although the concept for the compression was the same, the way the different systems deal with colors or with pictures is different," Tarolla explained.

This compressed video, running at 15 frames per second, also had to have synchronized audio. Audio was captured separately and digitized onto a Macintosh system with an off-the-shelf system. ICOM developed its own compiler program to then merge and interleave the audio, mastering the very difficult task of synchronizing this audio with the low frame-rate video and "having the words come out when their lips move."

Making a game of it

Once all the video had been dealt with, ICOM still had to create a video game, and had to do this for several different platforms that don't work at all alike. A number of proprietary tools developed by the company over the past three years allowed them to achieve this goal.

The video game systems, including NEC Turbo-Grafx-16 and PC Engine, for example, operate with a cell-based graphics system, very different from the pixel-based graphics used by the personal computer systems like IBM and Macintosh. All of the video, as well as the game graphics and more than 250 hand-drawn illustrations, had to be processed for each of these systems. ICOM developed a tool to turn its bitmaps into cell-based characters automatically, and with higher quality than is common on these game systems. "This works with the video in Sherlock Holmes, and also with the graphics," Tarolla explained.

On the computer side, the graphics requirements of the systems were also different. Commodore's CDTV allows roughly 200 colors for video, while the IBM systems can handle 256 colors and the Macintosh as many as 16 million. The game's graphics, originally built as PICT files on the Mac, had to be converted and adapted for each system.

Another very important development was that of a CD-ROM emula-

The company that produces the cheapest encoder board opens the mass market. Radius, RasterOps and SuperMac are after the professional non-linear editing crowd using M-JPEG. Let them have it and go after the low end MPEG market.

The dealer gets a straight forward service business. Shove the tape into the VCR, hit play and then pop out the CD-ROM. If the dealer wants to add more value that is always an option. They also pick up the revenue stream from producing the check disks.

The one man software company gets a shake and bake market. He doesn't have to produce an entire product, just a collection of modules.

Is it as simple as that, of course not! The point is to think like this. Take the pieces that you can make work and run with them.

If you're looking for the Russian satellite article it never showed. Possibly the person promised more than they could deliver. If it makes it in I will print it. In the meantime, there are other sources for this data which I'll start tracking down.

To subscribers; this issue is way late. Next issue will go to the printers in late November. Starting with the Winter issue (Jan 94) we should be back on track. Sorry for the delays.

The Publisher,

Marc P Seybold

marc_p_seybold@cup.portal.com

1993 Independent CD-ROM Sales

	Installed Base
CD-I	73,000
Data Discman	34,000
Photo-CD	95,000
MMCD	26,000
VIS	11,000
Sega	970,000

According to a March report by the Optical Publishing Association. A complete report is available from OPA (614)442-8805

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tor, which allows a hard drive to work like a CD-ROM drive. "This is important to any CD-ROM developer for testing and debugging," Tarolla said. "Otherwise, you have to burn-in a single CD to test the game, and this can be very expensive, and can take three or four days. When you make a change, you want to see what it looks like now, not three days from now."

This emulator is actually a group of emulators, in that a different solution had to be developed for each platform. For the Fujitsu, NEC, Commodore and, incidentally, SEGA systems, a hardware/software solution was developed by ICOM's engineers. For the PC and Mac, a software-only system was developed. ICOM has since sold its CD-ROM emulators as hardware/software products to Commodore, Fujitsu, NEC and SEGA.

"ICOM's long-term investment and vision in creating all of the necessary technologies along the way has not only brought us to this point, where we have released the first interactive movie with the video quality to live up to the name" said Tarolla. "It has also

provided us with strategic advances that we can apply to our next content development project, and to those of our publishing division's clientele."

What next? According to Tarolla, digitizing time has been cut from eight weeks to four, and the company is working on next-generation technologies that will increase screen size and frame rates. Three new mysteries for Holmes to solve are already in the can, with Macintosh and PC releases slated for late summer, and the company is looking at a horror-movie theme for its next project.

Well, my dear Watson, it doesn't sound exactly... elementary.§

A Short History of The ARexx Cookbook

by *Merrill Callaway*

My career has turned out to be writing in some form or another, although I hold degrees in applied mathematics and art. It seems that my primary motive has been to create. In the case of a new project, I often find myself sythesizing something unexpected (even by me) from all the disparate parts of my experiences. This creative inspiration is not to be explained beyond a certain point, however. A Good Idea is one of God's gifts, and we cannot take credit for it. Inspiration is non-transferrable, and unpredictable. Nevertheless, in economic terms, one has to have a Good Idea before it is feasible to continue as an Amiga developer.

The ARexx Cookbook was my Good Idea. In 1984, I left my successful but stressful and boring career as a Senior Logistics Engineer in the

Developer's Roundtable

With the summer doldrums not that much going on.

ITEM Creative Equipment has started an Amiga dealers association. For more information contact them at (305) 266-2800. Alex Amor, president of Creative Equipment is one of the new breed of entrepreneurs coming into this market. They have been very aggressive in recruiting new dealers. These are exactly the type of business people we hope to see more of.

ITEM The Australians have formed a developers association. Contact is Tony Day at tonyd@tts.adsp.sub.org. No other info available.

ITEM Exemplar, is now called OpenDoc. OpenDoc is the name IBM, Apple, Novell etc. are calling their open document architecture. It will be published for general use in the spring. The current intention is to place it into the public domain. OpenDoc is of most interest to Amiga companies marketing desktop publishing software. This includes wordprocessors, drawing programs etc. Given the current Commodore situation this is an every man for himself situation. If OpenDoc is important to you follow-up on it, don't wait for someone to bring it to you.

ITEM R.I.P. Briwall has disconnected the phones and apparently shut down. Micro-Pace an Amiga distributor has set up a mail order operation, Select Solutions. PPS still exists but has hunkered down to try and complete a video product that would be usable with Amiga, Mac and PC.

ITEM At least one start-up developer is interested in forming some kind of co-op to spread costs such as advertising. If you are interested in this idea please contact me.

ITEM There has been a response to the search for someone with the skills to port Dylan to the Amiga.

ITEM National Laboratory for Interactive Information Technology, James Madison Memorial Building of the library of Congress, Washington DC, Jacqueline Hess Director. The NDL is set up for companies to come and kick the tires on multimedia technology. Equipment and software are provided by vendors. This facility is used by many companies. If you don't supply them with your equipment and software you are missing a great opportunity. GET YOUR PRODUCT IN THERE.

aerospace industry to do a solo bicycle tour of as much of the world as I could. In 1988, after 25,000 miles, 26 countries, and too many adventures, my resume had a huge hole in it, and so did the US aerospace economy. After two more years of finding no work in my technical field and being turned down as "over-qualified" for other jobs, I despaired of getting a "real job". In 1990 I bought a used Amiga 2000 to console myself and occupy my time and my mind in between temporary jobs. One night, late, I discovered a quirk in Deluxe Paint III that was most interesting. I submitted an article about it to *Amazing Computing* magazine; five months later they published it, and indicated they were interested in more. By this time I had decided to devote my full time to the Amiga, but I wanted it to be as a computer artist or videographer. I started my business, WHITESTONE with this in mind. Meanwhile, I had been struggling to learn ARexx, a truly beautiful and powerful language (that now comes standard with every Amiga) but which did not have any tutorial information available. *Amazing Computing* expressed interest in any "how-to's" I might pen about ARexx. The idea for a tutorial book on ARexx came to me then. There were no books on ARexx available, and I had by this time amassed lots of ARexx know-how that I could market. My research showed that if I could hold down overhead, the book would be profitable.

I continued to write for the magazine while I secretly wrote *The Arexx Cookbook*. A reader suggested I do a column on ARexx after the success of my first ARexx article. She wrote to the publisher and he agreed. The ARexx Column was an important catalyst in writing the book; and it established my name as the "ARexx Guy" in my future customers' memories. From start to finish the book took eight months (part time) to write and do the page layout. I don't count the hours I spent on the programs on disk. It's my entire collection of ARexx programs on two full disks--two years of my life. It is an on-going project to include strong application examples to go with the book. The next disk will most likely be for the Video Toaster. The focus from the start was to write a solid tutorial around strong examples. My intent was to spare my readers the hardship and frustration I experienced trying to learn ARexx from scratch without any tutorial information, as well as to include a wide spectrum of plug-and-go programs.

The only documentation that comes with ARexx to this day is the reference manual. It's sort of like trying to learn Spanish with only a dictionary; possible but not fun. *The ARexx Cookbook* provides the language lab, the grammar book, the teacher, and the literature. *The ARexx Cookbook* repeats nothing from the excellent and essential reference manual by Bill Hawes, the author of ARexx. Rather, it extensively cross references his manual, the Commodore documentation, and even the manuals of the application programs cited in the *Cookbook*. The 600 item index was generated with ARexx, and these programs are on Disk II.

I began the manuscript in July, 1991. In December, 1991, I bought Pagestream 2 (by Soft Logik). I knew little about Desk Top Publishing. I liked the Pagestream manual, however, and actually measured it and used most of its layout as my own, making font changes and doing

NewsLine

Apple to build future PowerPC machines using the PCI local bus. The French Embassy Trade Commission has established an automated FAX and voice system to provide US business people with information on French technology. Dial 1-800-525FRANCE for more info, including computer companies.

SGI introduces $4995 Indy workstation with 15 inch monitor, built in camera but no hard disk. With 32M RAM, 340M byte disk and 19 inch color monitor $17,495 plus software.($35,000 just for the current version of Wavefront!).

Now What Software 800-322-1954 has released the Small Blue Planet CD-ROM. The disk is filled with imagery from various government agencies such as NASA and NOAA. This is a Mac disk so call to check picture file formats before trying to use on Amiga.

Magni and GVP in joint development agreement to provide desktop video solutions for the PC marketplace. Magni will design and manufacture a VGA to video graphics card called GLock-VGA+ which GVP will private label.

ImageWare ships first Windows bit mapped program that allows users to work with bit maps as if they were vector graphics. $99 (619) 457-8600

FuziWare has introduced Fuzicalc, a fuzzy logic based spreadsheet. $99 (800) 472-6183

Looking for info about the DOD Computer language ADA? Dial (800) 232-9925, it's a BBS.

StarMicronics America (212) 986-6770 introduced the $599 SJ-144 color printer. This is a 360 dot per inch printer that uses heat fusion to bond a polyester substance to the paper. Output from this is very vibrant since it is not a wet process.

The Interactive Multimedia Association is a trade group representing application developers, hardware and software suppliers and users in the multimedia industry. The association has created the Compatibility Project to foster cross platform compatibility among multimedia applications. Brian Marquart is project director and can be contacted at 71431,3312@compuserve.com. If you develop Amiga multimedia software please contact him.

a few other things differently. I even found out the name of Soft Logik's printer in St. Louis and since their prices were very competitive, I had them print 3000 copies of my book. I chose very rugged paper, 70 pound for pages and 100 pound for the covers, with a sturdy wire'O binding. I meant the book to be heavily used and hold up well, so I did not cut costs to sacrifice quality. For service bureau work, *Amazing Computing* has an excellent facility. I sent them the pages in Pagestream format and they output via PostScript to a 2450 dots per inch Linotronic Imagesetter direct to negative film--state of the art.

A publishing lawyer told me that it was "complex" to publish myself. Nonsense! The reason you get flak from a "real" publisher is that it is so easy to do it yourself. They know that unless they discourage you, you will get all the profits that they would ordinarily get. A trip to my public library netted me several books on how to apply for the copyrights at the Library of Congress and the International Standard Book Number (ISBN) at the RR Bowker Co. in New Jersey. Both cost me $120 total and involved filling in two one-page forms. My book ISBN is listed in *Books in Print,* (also on CD), and in *Forthcoming Books.* The book itself has international bar code on it for use all over the world via the EAN Bookland code (the artwork costs $25). It is essential to do a proper job publishing if you want your book to be noticed.

Self publishing is worth it if you are selling to a niche market like the Amiga. For a general readership book, a commercial publisher is perhaps better because of their superior distribution. If your book is not in distribution, it will die. There are only a few magazines and publications in which to advertise Amiga products and only three major US Distributors, so it is possible to get into distribution rapidly if your product is in demand. In a niche market, a Good Idea will distribute itself once favorable word of mouth occurs. Satisfied customers uploaded recommendation of my book to various computer Bulletin Boards. This was probably as helpful to sales as costly advertising.

The book arrived from the printers in mid June, 1992, and my first wave of advertising kicked in about mid August, 1992. I "primed the pump" by sending influential people copies of my book. By July, the first distributor put in a large order. By the end of September, all major US distributors too), one English, and one Swedish distributor carried *The ARexx Cookbook,* and the venture was showing a profit.

I have especially enjoyed exhibiting at the World of Commodore Amiga shows. Not only the Amiga users, but all the Amiga Developers are the best group of people I have ever worked with. We all help each other. The Amiga is the best platform for entrepreneurs. There are more areas for product development than you will find in the IBM or Mac arenas, where every product you can conceive will have five or six versions glutting the cutthroat market. Why compete? There are abundant opportunities to develop a unique Amiga product from your Good Ideas in one of the best niche markets around, and you can devote all your efforts to making your product the very best quality, rather than trying to come up with a new marketing gimmick to get it noticed among the crowd.§

Order Information:

IBM to produce Atari Jaguar 64 bit real-time 3D game console. Estimated price $199.

Sony,Matsushita,Victor and Philips have agreed on a new video format called Video CD. This is MPEG on compact disc.

AT&T has taken a 20% stake in Sierra Network. The Sierra Network was conceived as a cyberspace theme park where people could battle animated dragons and or just socialize. Contact Sierra On-Line in Oakhurst CA.

Seven Seas Software announces the opening of the FLOATING POINT gallery on July 2, 1993, in Port Townsend WA. The exhibit is titled "The Artist and Computer Graphics" Seven Seas produces software for graphics and mathematics, its premiere product is MathVISION.

Walnut Creek CD-ROM has an Aminet CD. It is from the Amiga usenet archives. $25 contact (800) 786-9907

AugmenTek introduces TorqueWare for the Amiga. TorqueWare is an implementation of the C-Linda distributed programming model. Contact Stephen Rondeau at (206) 246-6077.

This may ring a bell because C-Linda's inventor was recently the victim of a letter bomb. For 15 years a mysterious bomber has been targeting university researchers, C-Linda's inventor was the most recent casualty. He survived but has been maimed.

For new readers wondering why NewsLine is mostly non Amiga here is why? Amiga developers frequently operate beyond just the Amiga market and so this helps provide some background on what is happening. Even for those that do not work with other platforms they have to compete with them. To do that they need information on what is going on out there.

1992 Worldwide shipments millions of units.

Apple Computer	1.4
IBM	1.3
Compaq	.740
Packard Bell	.570
Zenith	.170

Source BIS Strategic Decisions(PC Week June 7)

WHITESTONE
511-A Girard SE
Albuquerque, NM 87106 USA
(505) 268-0678

Deluxe Two Disk Set: $54.90 Priority Postage Paid. Canada add $2.50; Overseas add $10.00. USA: Personal Checks or Money Orders. Other: Money Order or Cashier's Checks in US $

COMMODORE, NEWS FROM THE UK

by *Janet Bickerstaff*

On the 16th April 1993 commodore UK announced that Kelly Sumner, General Manager for ten months, had left. Two insiders were appointed to take his place. David Pleasance rejoined the UK company as General Manager - Sales and Marketing. David played the leading role in the success of the Amiga in the UK in the late eighties. Colin Proudfoot, has been appointed General Manager - Operations and Finance. He joined Commodore nearly two years ago and was Commercial Controller prior to becoming Finance Director last year.

We have known David Pleasance for many years. He was UK Sales Manager prior to moving to Switzerland to head up Commodore Electronics, after which he became Vice President of Consumer Sales in the States. He returned to Maidenhead in November 1992 as Vice-President of international Sale.s, and continues to cover Commodore sales in twenty seven countries.

Commodore - The Facts

On the 8th June a meeting of the "Buxton Group" (European Multimedia Research Group) was held at the Holiday Inn in Maidenhead. The first part of the meeting was truly farcical as Non-Disclosure Agreements prevented discussion of the very subject that the UK developers were just itching to talk about. The July issues of UK Amiga magazines contained an advertisement offering an Amiga CD Console for sale with delivery in August. For over an hour there was considerable discussion on mythical vapourware, with some developers remained tight-lipped, but I can make no further comment on this subject.

The chairman of the meeting, Paul Ralph of Almathera Systems, was relieved to welcome David Pleasance, who had just come from a meeting with Mehdi Ali. David immediately switched the subject to that of the future of Commodore International. The nets had been rife with rumours of Commodore's downfall and David gave us the true facts.

He said that following the losses of £177 million in the March quarter, Commodore decided to go to its major creditor, the Prudential, and put forward a plan which would allow Commodore to restructure itself in

User Groups

Listen up. As part of next issue's talent registry I would like to print some information about Amiga users groups. Send the number of your PAID memberships and what the dues are.

Based on FIVE direct mailings to users groups I have formed some opinions, both good and bad. This is your chance to show the good side.

If you know of other user groups please pass on this request, don't depend on them getting their own copy of Argonauts.

Please send this information to the Argonauts PO Box by the end of October. Thank You.

Second request. There is a lot of talk about how big or small the dealer base actually is. Send the name and address of any Amiga dealers you are aware of.

Do not worry that you might be duplicating someone else's names, I will sort them out.

Getting this information is very important since it gives developers a feel for just how much product can be realistically moved.

It is also a general reading of the health of the market.

All good things come to an end. If you have not taken out a subscription yet this is the end of the line.

About a year ago I obtained from Commodore the official user group mailing list and started sending out Argonauts to the groups. Now that the year is up, you have to decide if you want to stay aboard.

line with the current market conditions; that plan was wholeheartedly accepted by the Prudential. The restructuring took the form of two parts. First of all it was decided that the older 16-bit Amiga technology was no longer viable at its present price in the high streets around Europe, so a provision was made for the write-down of A500 and A600 products. This amounted to $65 million. Because of these provisions it has been possible to reduce the price of the basic A600 to under £200.

A second provision of around $70 million covers the complete restructuring of Commodore sales and marketing throughout the world. The offices in Austria, Holland and Belgium are closing and those countries, plus Switzerland where Commodore Electronics is situated, will be operated and supported out of Commodore Germany. A new European distribution centre has been opened in Germany. Offices in Spain and Portugal are closing and distributors will be appointed. In Scandinavia, the offices in Sweden and Norway are closing and those countries will be run out of Denmark. In the States, the business is being put to five distributors across the States and this will be run by seven or eight people in the US company. Irving Gould is even selling the executive jet.

In the UK there is not too much change as it is the strongest Amiga country. However, Gary Lewis (ex Retail Marketing Manager) has joined Kelly Sumner (ex Managing Director) at Gametek UK. Jim Mackonochie ex General Manager CDTV Europe) has gone to Mindscape, where he has been joined by Clive Fort (ex Technical Support Manager). There have also been a number of other departures in recent weeks.

David Pleasance went on to say that these changes have allowed Commodore to restructure in their own way, rather than having to go into Chapter 11, at which point you have to restructure as other people tell you. EIe said "It is nice that we are in control of our own destiny. I personally think that this is the best thing that has happened to us for a long time. We know what we are, who we are and where we are going. It is very important to remember that. We will certainly have a tough time for the next three months and cash flow is crucial."

He said "Commodore is not going broke. The banks are supporting us, and I do not see a major problem. The risk of Chapter 11 has gone." He went on to say "We will definitely be in the black by the Christmas quarter."

Markets are being developed in both Poland and India. In fact a factory to assemble C64s has been built in India where there is a huge potential market.

New Technology

The discussion tuned to the AAA chipset and RISC technology. David said "The AAA chips are ten times more powerful than the AA chips and are currently beta-testing well. The new machines will be DOS compatible with Windows NT. Anything which will run on Pentium will run on our machine only five times faster than Pentium. It will be very competitive in price."

Research Corner

Digest of Papers, COMPCON SPRING 93, IEEE Press.

Obtain through InterLibrary Loan.

Here in one place is everything you wanted to know about all the new processors you keep hearing about. DEC Alpha, Pentium, 3DO and Newton with the ARM, Apple & IBM with PowerPC, HP and the PA Risc chip.

Most of the papers were written by the engineers that designed these things. While a technical background helps, anyone comfortable reading Byte can read these papers.

A portion of the Table of Contents is reproduced below to give a feel for how comprehensive this volume is.

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It was at this stage that Lew Eggebrecht, Vice-President of Engineering, joined the meeting and addressed the developers. He outlined the future high-end and low-end chipsets. The high end chip set will he for work-station applications using the combination of AAA architecture and RISC technology.

After a deal of evaluation Commodore will probably be using the Hewlett Packard PA (Precision Architecture) RISC chip. Lew confirmed that there is no danger that the machine would become a PC. It will still be an Amiga running Amiga software, but having complete compatibility with productivity and scientific software on other machines. There was discussion on applications for this machine and I asked Lew what he was looking for from the developers. He replied "Lots of good quality software."

Lew said that for the CD market they are looking for really good arcade quality, 3D games software which will display the ability of the Amiga. Developers wishing to develop for this market should apply to CATS as soon as possible for an information kit which is available to ensure that their software will he compatible with any future announcements. He said that reference material is not so successful on CD for the home user. Its place is in an office environment. On Kodak Photo CD, he said that again its home market is small - people soon become bored with others' holiday photos - its real use is for record storage, student training etc.

Asked when the MPEG chipset would be incorporated into the low-end Amiga, Lew said "When the cost comes down. At the moment they are very expensive. At the moment the movie industry is resisting MPEG I and the cable and satellite industry don't like it exactly as it is either. The MPEG situation is very confused at the moment."

David Pleasance dealt with questions regarding marketing the Amiga, particularly in America. He pointed out that just to do a very modest advertising campaign covering twenty cities in the States costs around $25 million and this would involve a major investment. Lew Eggehrecht said that although at the moment it appeared that they were being squeezed between low price PCs and the Sega and Nintendo games consoles, there is a good market space there for the Amiga. Some really exciting demos are needed from the developers to display in the shops the amazing capabilities of the Amiga. This Christmas Commodore should do extremely well.

Well, we have heard the words of encouragement from those at the top. Maybe now is the time to buy some shares.§

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SYMPATHY FOR THE DEVIL

by *Dale Larson*

Welcome to "Sympathy for the Devil," a new regular column in Argonauts. As the by-line should indicate, my name is Dale Larson. So

much for guessing. Since we'll be spending a little time together every few months, I thought I should tell you a little about who I am and why I'm here.

All of you have to work with Commodore to a greater or lesser degree directly or indirectly. Most of you love the Amiga. Most of you hate Commodore. Or, at the very least wonder what is going on inside that place. I don't know what I can say about hating Commodore(except, maybe, "Welcome to the club!"), but I can provide some insight into what is going on inside that place.

While I was a Software Engineer at Commodore, I worked in the Amiga Networking Group and in the New Hardware Product Assurance group (or something like that -- I think the group's name changed three times in a year). I worked with AS225, SANA-II, Amiga OS 2.04 and 3.0, the A4000, the A1200 and other projects.

I worked closely with developers while taking SANA-II through the standardization process and again when testing products for compatibility with the new hardware platforms (A4000 and A1200). Of course I attended DevCons, wrote a few AmigaMail articles, edited AutoDocs and beta tested various Amiga products, etc.

I did have a life before Commodore, I swear. Here are some highlights. I once worked in a research laboratory as a programmer. I did statistical analysis of data on experimental varieties of hops. This was my contribution to the welfare of mankind -- few causes are more noble than better beer! As part of getting a BS degree I spent much time studying human-computer interface and groupware. I also spent the better part of three years working on and off in a law office; alternately being a legal assistant and maintaining their only computers -- a network of Amigas.

On April 23 of this year, I was part of a Commodore layoff that included a dozen or so people at West Chester, and more outside West Chester (I think the US regional sales offices closed). As I'm sure you all know by now, on June 11, there were even larger layoffs. According to the Philadelphia Inquirer, eighty people were let go, twenty-nine of them engineers who are involved with developing new products.

There is a much better reason for all of these layoffs than executive whim. (Many people, right or not, attribute all of Commodore's moves to executive whim.) The company's financial are in serious trouble. Commodore posted a loss of $177 million last quarter. Many people don't understand how large a loss this is for Commodore. Others wonder how they could actually lose this much.

I don't have any inside information (the engineers and accountants don't talk much), nor particular insight into the world of high finances ("Damnit Jim, I'm an engineer, not a financier"). I have been reading the papers, and I have talked to financially literate persons when I had questions. Here is my simplified understanding of the basic idea (apologies to those of you who generate more income while managing a portfolio than while wearing a pocket protector):

First how? Most was only a paper loss -- the devaluation of inventory and unspecified restructuring charges. A paper loss means that it wasn't a loss of money in the bank, it was a loss of what the books say

Books

Game Over: How Nintendo Zapped An American Industry, Captured Your Dollars and Enslaved Your Children

By **David Sheff**

Just what it says. An interesting read for future empire builders.

The design of Everyday Things

By **Don Norman**

Some things that were done right and some wrong. Interesting and useful to get you thinking about design.

Notice to Subscribers

When the subscription price went from $50 to $25 something had to give. The free classified offer is replaced by a registry listing. The free advertising space offer is rescinded.

If you filled out a previous Registry Form please look over the new form. If it better reflects your skills feel free to send it in. We'll replace your old form with the updated one.

the company is worth. At the time someone put a bunch of inventory on the books, they thought it was worth X dollars. Later (last quarter), someone decided that a lot of unsold inventory was only worth X/2 or something.

For the last several quarters, posted profits might have been lower and posted losses larger if the person doing the books had a crystal ball through which to see the eventual true value of the inventory being put on the books. So the loss was probably over a much longer period of time, but no one saw just how bad it was.

Next, how bad? Don't be fooled by the fact that it was "only a paper loss." That means that a lot of shareholder equity was only on paper, too. As I understand it, Commodore shareholders' equity dropped 90% during the last few months. By the end of March it was only worth something like thirty million dollars. That's on 33 million shares of stock, by the way.

According to an article in the Philadelphia Inquirer, at the rate the losses were going, the thirty million would be long gone by now. It gets worse. Commodore owes money -- more than thirty million dollars to Prudential alone. Commodore is technically in default on that loan and has until July 31 to restructure. The rumor mill has it that Gould and Ali have both taken substantial paycuts and that even the private jet has been sold off.

By the time you read this, the short term fate of Commodore should have been decided or is about to be decided. It could mean BIG trouble, or it could mean a temporary reprieve. Since it has already affected 29 engineers, it is certain to affect you, too.

Given all the bad news, there has recently been much talk in the Amiga developer community about abandoning ship or otherwise giving up in despair. Those who haven't said they are putting new development on hold are wondering whether they should. Let's look at that briefly.

First, unless Commodore has more dramatic layoffs in engineering, things aren't as bad as they might sound for the possibilities for new Amiga development. With one or two exceptions, the engineers who were layed off were not primarily design engineers. For the most part, they didn't make the cool new toys. They helped to test them, support them, or whatever.

It will hurt, and the people who left, even though many are less visible than the ones remaining, did play important roles. Still, the key people holding the majority of the irreplaceable knowledge of how to keep the Amiga going are still at Commodore. Dave, George, Greg and others are still doing hardware. There is still a group working in silicon. Randell is still doing DOS, Peter is still doing Intuition, Spence and Chris are still doing Graphics, etc.(update: Chris has recently left Commodore, Eric Cotton was rehired)

Sure, the layoffs in CATS hurt, but even that isn't as bad as it could be. The most technical people seemed to be the ones who stayed. The RKMs never came out very quickly anyway, paper work will be slower without most of the people who did clerical and administrative support, there may not be much marketing help, or as much support for certified developers, but the commercial developers shouldn't notice

Product Ideas

#1

A few issues back I tossed out an idea for a children's program centered on the idea of paper cut outs. At MacWorld Broderbund was selling a much less ambitious product also based on cut outs called "Kid Cuts." This is a static program where you print out predrawn pictures and then cut and glue.

The market opportunity for the children's program described previously is still there. In fact Kid Cuts has wetted kid's appetite and set them up for something more ambitious.

In combination with the new color printer from StarMicronics (see newsline) this could be a great match for the Amiga.

#2

A map locating system. The customer uses the program to draw an isomorphic map, one that looks like the real route, not all bent to nice neat right angles. The map consists of points and connected lines. The points represent areas of interest.

Once the map is drawn a consumer should be able to walk up to it, select any two points, and get graphic and written instructions for how to move between them.

The first graphic should give them an overhead view of the selected route. The system should highlight the route slowly enough for people to get a feel for where each turn is.

The second graphic instructions should include a wire frame flyby of the recommended route at street level. Prominent landmarks should be highlighted along the way.

Such a product could be marketed two ways. First as a stand-alone package aimed at single users. Properly marketed it has a certain toy appeal as well as the obvious practical uses.

The other primary market would be the kiosk VARS. The trick is to license it cheaply enough so that it pays for them

too much difference. Maybe Argonauts can pick up the slack in marketing help anyway...

Even if Commodore disappeared or had more dramatic layoffs tomorrow (and I'm not saying it will), there is still potential long life left in the third-party Amiga market. Four million people aren't going to put their computers in the closet unless the third-party developers orphan them, too. Look at how long some people have kept using their C64s.

Here is a hint about one way you can keep making money as a third party developer for the Amiga: sell updates. I hate paying double the price of the original product in updates, but I seem to end up doing it anyway on some products. Some companies even come out with a renamed "new product" after a few years rather than limiting themselves to just a new version every six months. It's usually much easier to recode your application after years of maintenance than it is to keep patching new things onto it, and it doesn't take nearly as much time as writing it the first time did.

Maybe you can't make a profit selling brand new apps for the Amiga if Commodore isn't here to make it, but you can still make money from updates, and the difference is mostly one of semantics. Moving some of your resources to other markets makes a lot of sense if you have a lot of resources. Note that the converse is true also. Small companies with low overhead dominate the Amiga market. This doesn't appear to be as true of other markets. If you abandon or dramatically cut back on your Amiga products, you can look forward to zero cash flow until you establish yourself elsewhere.

If you double your overhead to provide adequate service of two markets, you are going to lose the advantage you used to have. If you take things slowly, you may be able to develop a strategy that lets you service two markets better than you are now servicing one and with less then double overhead. The strategy is to make good investments. Redesign and reimplement your killer apps with strict engineering discipline, and with portability and expendability in mind.

You will have higher quality with lower cost of maintenance, giving you a better reputation and the ability to better keep up with the competition's feature list. Hire an expert in Human-Computer Interface to provide design assistance and scientific usability studies on your applications. Hire professional documentation people to write clear, concise and complete manuals.

You will have lower support costs in the long run --fewer calls and letters from confused or "stupid" end-users. Once you've made these investments, the cost of adding a second platform to your market will be dramatically easier on your pocketbook. I have more ideas on this topic, but that's it for this issue.

The publisher thought you'd want to hear analysis and opinion from someone who used to run in the halls of Commodore. The column was his idea, not mine. So blame him if you don't like it, and let him know if you do like it. Please drop me a line. I'd like to hear your suggestions for topics and questions you'd like to see addressed. Send me a note to say why. You can write to me in care of the publisher.

Some topics for future columns may include: "Standards: Extending

to use it as a competitive advantage. Make it too expensive on a per kiosk basis and they won't use it. Something in the $25 to $50 range is probably about right depending on volume.

Remember that in many instances you will be talking about thousands of stations. As a product, this has the added attraction of tying into the current AT&T commercials that end with the tag line, "Someday you will be able to do this."

Done with enough flash, this application would sell itself. It also has secondary income possibilities. It opens a market for 3D wire frame models of major cities and tourist attractions.

#3

Voting systems. Way back in the first issue I promised an idea for selling groupware to people with only one computer. For reasonably small groups that don't vote all at once this is it. You need only one computer to handle the groupware voting application.

A computerised voting system is not as easy a thing to create as it looks. In the real world you need to maintain both the accuracy of the vote as well as preserve the anonymity of the voters.

No one, including the programs author, should be able to go in and tell how anyone voted. At the same time the system must prevent duplicate or fraudulent votes and must operate in an environment were it might take several days for everyone to cast their ballot.

There are many thousands of Church and social groups, to say nothing of local political groups who would be candidates for such software.

The key is the security built into the program. People have to have absolute confidence in the inner workings of such a product or it will not sell.

This is a prime example of a vertical market. Make this program good enough and you can sell computers that will never be used for anything else.

Amiga Capabilities Gracefully," "Commodore Structure (or How to tell CATS from CIL and CISCO)," "Testing as Part of a Software Engineering Process," and "What is Realistically Needed to be a Real Developer."§

-Dale

Disclaimer: I don't work at Commodore any more. I don't speak for them. I never did. I know some things that you don't and I can't talk about them.

...the typical software firm employs six people and generates approximately $560,000 in annual revenues.

Bill Gates

MacWorld Special

Why MacWorld coverage in Argonauts? With most of Apple's desktop publishing software being ported over to Windows, they are under tremendous pressure to find high margin markets to replace some of the revenues they are losing in the desktop publishing field.

Video is one area they have selected. Only problem is that someone else got there first and now has to be dislodged. That someone is Commodore.

MacWorld

General impressions. Macworld is big. Lumping all of the exhibit space together it felt about the size of PC Expo in New York City. Attendees are representative of the general population. About equal men and women with jeans and sneakers outnumbering suites and ties.

Newton is cool. More memory, two PCMCIA slots, a built in two way radio link and speech recognition would make it perfect. Almost scary to think were it will be two years from now.

AV Macs. "Open the pod bay doors HAL." The Apple booth showing these was mobbed constantly. Video in/out, built in frame grabbing, geoport, DSP, DMA, video slot, continuous speech recognition. Price without monitor but w/80HD and 8RAM about $2,495 for 660av.

PowerPC's are real. There was a room full of them, reminded me of the A4000 room at Orlando Dev-Con. Things definitely seem on target for a spring introduction date.

These machines were hidden away off the exhibit main floor and were meant for developers to test their software. If you didn't know where to look you would not have seen them.

Tons and tons of software. If you saw the Gryphon booth you would have thought they invented morphing. ASDG, Gold Disk and Supra were there. When I asked their marketing reps about the Amiga they said, "What's an Omega?" Just kidding. ASDG was showing Elastic Reality. A very nice professional morphing tool priced at $995. Supra had their modems and Gold Disk Astound presentation software.

SuperMac, RasterOps and Radius all showed M-JPEG non linear video editing based systems. All priced around $5,000. These were at about super VHS quality (this is a subjective statement based on the screen displays. All three of the vendors saw their products as being used to create edit decision lists. These lists in turn would be used to edit the "real" video.

HSC was drawing a crowd with FITS Live Picture. This is image manipulation based on a new software technology. It allowed Photoshop type operations on full color images in near real time on a Quadra 900 with 64Mbytes of RAM. Price for the software estimated at $3,495.

There was even a Toaster pretender, the Video Machine. Very expensive, almost $6,000 and without the Toaster's LightWave. On the plus side it included two time base correctors, CG software and programmable DVEs. It also works with

PAL, SECAM and NTSC. If the Toaster didn't exist this would be a winner for NTSC people, as it is it, it is a strong choice for Europeans. (No PAL Toaster)

Over in Developer Central many slick tools on display. Things like Apple's Media Tools, Echo Logic's translation software. 68K binary in, PowerPC binary out. WordPerfect for Mac is an assembly language program, Echo Logic has been used to port it over. As a test Echo Logic even used their product to port the Mac OS itself to PowerPC. This was done internally by them and has nothing to do with Apple's port of the Finder.

There were enough tools to make an Amiga developer think he died and went to heaven. In general a very upbeat mood. Newton and the av Macs here now, PowerPC right around the corner.

AV Macs

Everyone's first question is,"Are these Amiga killers?" Not in their first incarnation. These machines are Apple's first try and developer's are reluctant to invest resources until they see these technologies carried into PowerPC. They also want to see decent sales rates, for them about 5,000 units per month.

They are more of a wake up call. The Amiga will now have to compete much more on the basis of price than features.§

Argonauts Amiga Registry

(This form may be duplicated)

The purpose of the Registry is to help commercially active Amiga people connect with each other. The first registry will appear in Fall 93 issue of Argonauts.

A registry listing is a benefit offered to Argonauts subscribers. Limit one listing per subscription. If you are not a paid current subscriber, don't forget to send your subscription in with the form

First Name	Last Name

Company

Street Address

City	State/Province	Zip/Postal Code

Tel number, include all prefix codes	Country

CHECK ALL THAT APPLY

I am a ☐ certified developer ☐ commercial developer ☐ unregistered developer

☐ Publisher looking for products to market ☐ technical writer

☐ systems programmer ☐ application programmer ☐ animator

☐ 2D ☐ 3D artist

I know ☐ C ☐ C++ ☐ DSP ☐ Ass ☐ Oberon ☐ Objective-C

My specialty is: Check all that apply

☐ Entertainment ☐ Network ☐ Music ☐ Productivity

☐ Kiosks ☐ Education ☐ CD-ROMS ☐ Utilities

I have produced a commercial Amiga product _____

Product name

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Less than 1% of the known dealer base responded to last issue's survey. Several additional people made verbal commitments but did not follow through. This is a shame because even with the low response rate the information was useful. Remember that these figures were for the Jan 93 Quarter.

A little over 100 1200/4000 systems were reported sold. This tends to confirm the general impression that the small dealer is very much a few machines per quarter operation. The response rate was way to low and in any case was not a random sample to make any extrapolations about total sales for that period. Some trends were apparent though. There was a bow wave of upgrades going on since sales of memory/accelerator boards far exceeded new machine sales. This has by now died down. There is circumstantial evidence that people are uncomfortable buying high end systems through mail order. In contrast, they seem perfectly willing to buy expensive peripherals that way.

Based on this sample, roughly 25 video boards are sold per 100 system sales. If this turned out to be true in general for Amiga sales, it understates the financial influence of the video segment in this market. As a group, video boards are much more expensive and have higher margins than memory and accelerator boards.

Last and most surprising, conventional productivity software, word processors and a directory utility dominated non game sales. Incidently, there was an almost two to one ratio among sales of word processors for the leader. Finally, image manipulation software sold very strongly. To the point that people seem to be buying it just to have it.

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